REMARKS

Initially, please note that this response is a substantive response to the rejections set forth in the Office Action dated November 7, 2008, and a request that the finality of the previous Office Action be withdrawn. Note that the above amendment includes the previous amendment to claim 16 and cancels claims 39-41.

The final rejection of May 30, 2008 was vacated by the present "final" Office Action dated November 7, 2008. However, the Examiner did not enter the amendment presented in the response filed August 29, 2008 (see "Response to Arguments" lines 1-2). The Examiner's refusal to enter the amendment is contrary to MPEP 706.07(e) which states that "[W]hen a final rejection is withdrawn, all amendments filed after the final rejection are ordinarily entered."

Since the Office Action of May 30, 2008 was prematurely made final, the Examiner was obligated to enter the amendments presented in the response filed on August 29, 2008. Accordingly, the Examiner is requested to withdraw the finality of the previous Office Action, enter the amendment to claim 16, and issue an Office Action treating claim 16 as amended.

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Next, on pages 2-4 of the Office Action, claims 16, 22, 24-28 and 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over *JP 2002-48188 in view of Halter (U.S. Patent No.4,045,057).*

It is submitted that the present invention, as embodied by the amended claims, clearly distinguishes over the JP '188 and Halter references for the following reasons.

Initially, it is noted that, in the sentence following the statement of the ground of rejection, claim 16 is indicated to be rejected under 35 U.S.C. 102(b) as being anticipated by JP '188. Applicants assume that this sentence is an error. Clarification is requested.

The present invention, as defined by amended claim 16, requires that the intermittent welding is performed along a circumferential direction of the inner plates. This amendment clearly distinguishes over the Halter reference which includes continuous parallel welds in the circumferential direction of the plates or intermittent welds in an axial direction of the plates.

JP '188 describes two types of laminated plates. In particular, Fig. 1 shows a first embodiment in which a laminated plate (13), which comprises a prescribed number of thin steel plates (13c) and a thicker outer pressing plate (13b), is attached to a side plate (11; an example of a member of the machine) of a bucket (10) of a construction machine. Fig. 2 shows a second type which includes a laminated plate (23) having two thick pressing plates (23a, 23b; outer plates) and a prescribed number of steel plates (23c) which are thinner than the plates (23a, 23b) and are sandwiched between the thick pressing plates (23a, 23b). The laminated plate (23) is used as a side plate (an example of a member of the machine) of a bucket (20) of a construction machine.

The inner plates and the outer plates of the above-mentioned two types of laminated plates, described in JP '188, are connected by bolts, plug welding or all round fillet welding. When the laminated plates are attached to the member of the machine, or used as the member of the machine, the laminated plates are attached by means of bolts (see Figs. 1, 9, 10, etc.), or two pressing plates (outer plates) are attached by performing all round welding on the member of the machine (see Figs. 2, 8, etc.).

Further, each of the laminated plates shown in Fig. 7 of JP '188 comprises two thick pressing plates (outer plates; 71a, 72a; 71b, 72b; 71c, 72c; 71e, 72e) and thin steel plates (inner plates) sandwiched by the two outer plates. Also, the outer plates are welded by all round welding to the member of the machine. The peripheral shape of the thin steel plates (inner plates) is recessed from the outer periphery of the two pressing plates (outer plates), and the peripheral shape of the inner plates is similar to the peripheral shape of the outer plates. Thus, it is clear that the peripheral edge of the inner plates is not welded to the member of the machine.

Cleary, the JP '188 reference neither discloses nor suggests the features set forth in claim 22 of the present application. In particular, claim 22 requires that "the laminated plate (110, 131) is formed by laminating the inner plates (111, 131) and the outer plate (112, 132) whose peripheral edge has a shape that partially differs from those of peripheral edges of the inner plates" and that "the laminated plate (110, 130) is coupled to the member (103, 128) of the machine by performing . . . intermittent welding on the peripheral edges of the inner plates (111, 131)."

Further, as stated above, Figs. 1-13 of JP '188 show an example in which a laminated plate is attached to the member of the machine, and an example in which the laminated plate is used as the member of the machine. In each of these examples, the peripheral edge of the inner plates does not protrude from the peripheral edges of the outer plates. Thus, the laminated plates disclosed in JP '188 do not have a contact part that contacts with the member of the machine.

In other words, JP'188 neither discloses nor suggests the features set forth in claim 24 of the present invention, i.e., "the inner plates (111) define a contact part (111b) that protrudes from a peripheral edge of the outer plate (112) and contacts with the contact member (108), and continuous

welding that covers the contact part (111b) of the inner plate (111) is performed between the peripheral edge of the outer plate (112) and the contact member (108)."

Furthermore, it is apparent from Fig. 7 that JP'188 neither discloses nor suggests the limitations set forth in claim 25 of the present invention, that is, "a plurality of protruding parts (131a) that match a peripheral edge of the outer plate (132) are disposed on the peripheral edge of the inner plates (131), and the plurality of protruding parts (131a) of the inner plates (131) are intermittently welded by performing continuous welding on the peripheral edge of the outer plate (132)."

With regard to claims 36 and 38, the Examiner takes the following position:

"As concerns claims 36 and 38, the combination shows the contact part is demarcated by a cut-out part (dark solid black rectangles), and the cut-out part has a rectangular shape (see figure 16a-b of JP '188) and the cut-out part is embedded by welding and the inner plates are attached to the machine when the laminated plate is coupled to the members of the machine (abstract)."

However, Figs. 16(a) and 16(b) of JP '188 show an example in which the laminated plate is used as a member of a final case (150). This final case (150) is formed by welding by all round fillet welding (*indicated by the large triangular portions marked out in black in Fig. 16(a)*) a cylindrical laminated plate (151) and a disk-shape laminated plate (152). Also, an annular member (153), which forms a flange, is welded by all round fillet welding (*indicated by the small triangle portions marked out in black in Fig. 16*) on the other end of the laminated plates (151). Note that the cylindrical laminated plate is formed by joining a plurality of steel plates by plug welding (*indicated by the oblong portions marked out in black in Fig. 16*), and the disk-shaped laminated plate (152) is formed

by joining a plurality of steel plates by plug welding (*also shown as oblong portions marked out in black in Fig. 16*).

Fig. 16(a) is a sectional view viewed from the side of the cylindrical laminated plate (151) and Fig. 16(b) is a sectional view taken along line A-A, i.e., a sectional area viewed from the axial direction of the cylindrical laminated plate (151) of Fig. 16(a). Note, the inner plates of the laminated plates shown in Figs. 16(a) and 16(b) do not protrude from the periphery of the outer plates and do not have a contact part that contacts with the contact member of the machine.

As noted above, claim 24 (upon which claim 36 depends) specifies that "the inner plates define a contact part that protrudes from a peripheral edge of the outer plate and contacts with the contact member." Claim 36 specifies that the contact part is demarcated by a cut-out part. Clearly, Figs. 16(a) and 16(b) do not disclose any structure that could be read on the cut outs required in claim 36. Neither the disc-shaped plate (150), nor the cylindrical plate (151), has any plate that protrudes from a peripheral edge of the respective outer plates.

Therefore, contrary to the Examiner's position (pg. 5, lines 9-13), Figs. 16(a) and 16(b) of JP '188 neither disclose nor suggest the feature set forth in claim 36 of the present invention. That is, claim 36 requires that "the contact part is demarcated by a cut-out part, and the cut-out part has a rectangular shape." In JP '188 there are no cut-out parts, and therefore JP' 188 clearly does not include "rectangular" cut-out parts. Further, claim 38 requires that "the cut-out part is embedded by welding and the inner plates are attached to the machine when the laminated plate is coupled to the members of the machine." This feature is clearly not disclosed or suggested in the JP '188 reference.

Further, with respect to independent claim 16, the Examiner acknowledges, on page 3 of the Office Action, that JP' 188 does not include intermittent welding on the peripheral edges of the inner plates. In an attempt to supply this omission in the JP '188 device, the Examiner applies the Halter reference and explains that:

"*Halter shows a similar device for use of damping vibrations where inners* [sic] *layers of plates 7/8 are welded 10a/11a at their peripheries intermittently (fig 2-3) so vibration damping properties are maintained as a form of connection for inner plates. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify JP '188, as taught by Halter, for the expected result and benefit derived from the use of a known equivalent form of welding inner plates, intermittently along the periphery, that maintains and preserves the vibration damping properties of the layers while having a strong connection by means of intermittent periphery welding.*"

Halter, however, is directed to a vibration barrier/connector for conduits. The Halter device is applied in a completely different environment than that of the device of JP '188. As described in col. 2, lines 11-23 of the Halter reference, the device includes a vibration barrier (9) including washer-shaped plates (10, 11); header plates (7, 8); and bodies of vibration damping material in the form of washers (12, 13, 14). As shown in Fig. 2, the washer-shaped plates (10, 11) are secured at their outer peripheries, respectively, with the outer peripheries of the headers (7, 8) by continuous circumferential welds. The Examiner apparently considers the two continuous circumferential welds of Halter to correspond to the intermittent welds.

Initially, it is noted that there is no reason to provide the parallel continuous welds of Halter in JP '188 which employs plug welds to interconnect the inner plates. The resulting arrangement would include plug welds and parallel continuous welds. Thus, the resulting structure would further limit the deformation of the inner plates and would actually decrease the effectiveness of the device with respect to noise reduction. Further, the continuous parallel welds of Halter, if employed in the

environment of JP '188 would reduce the noise damping characteristics of the device disclosed in JP '188. Accordingly, it is submitted that there is no rational reason to combine the JP '188 and Halter references as proposed by the Examiner. In *KSR Int'l v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007), the Supreme Court stated that "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

Further, as amended, the intermittent welds of claim 16 are provided on peripheral edges of the inner plates in a plurality of locations, i.e. the welds are located along a circumferential direction of the inner plates. In contrast, the parallel continuous welds of Halter are formed along a lamination (or axial) direction of the plates being welded. Note that each continuous weld is provided along the entire periphery of the two plates being connected.

Thus, Halter does not meet the limitations of amended claim 16, and even if the welding technique disclosed in Halter could be employed in the JP '188 device, the resulting arrangement would not effectively reduce vibration and noise because weld-free plates will be present alternately in the laminated arrangement of the inner plates.

Further, with respect to claims 26 and 27, the Examiner states that the recited range would have been an obvious matter of design choice since "applicant has not disclosed that these ranges solve any particular problem or purpose and it appears other similar ranges would work equally well." The Examiner's position is respectfully traversed.

Initially, the Examiner's attention is directed to page 38, line 10 to page 39, line 11 of the specification as originally filed. In this portion of the specification, the relationship between the noise reduction effect and the welding pitch of the inner plates is described. As explained

therein, Applicant has discovered that if the welding pitch is in excess of 280 mm, the noise reduction effect drops as a result of a knocking sound generated by knocking between the inner plates, which is caused by local vibration of the peripheral edges of the inner plates. However, if the welding pitch is less than 100 mm, the relative displacement between the inner plates is unduly restricted, and the noise level increases as shown in Fig. 17. **Thus, the stated range does solve a particular problem and other similar ranges would not work as well.** The Examiner's statement that "applicant has not disclosed that these ranges solve any particular problem or purpose" is factually incorrect. Furthermore, the JP '188 reference does not disclose protruding parts of the inner plates (claim 16) or a contact part that protrudes from a peripheral edge of the outer plate (claim 24), and thus, the claimed range is not applicable to the JP '188 device. The Examiner is respectfully requested to explain how the dimension of a feature, which is not disclosed in the prior art, can be an obvious design choice.

In view of the above, the Examiner's statement that "the recited ranges do not solve any particular problem or purpose, and that similar ranges would work equally well" is not accurate. The Examiner's statement is refuted above. Further nothing in the present record supports the Examiner's contention that similar ranges would work equally well. This conclusion is apparently based on the Examiner's personal knowledge, and thus the Examiner is requested to provide an affidavit or declaration setting forth specific factual statements and explanation to support the stated conclusion. See MPEP 2144.03 and 37 CFR 1.104(d)(2).

In view of the above, it is submitted that the present application is now clearly in condition for allowance. The Examiner therefore is requested to enter the above amendment and

pass this case to issue.

In the event that the Examiner has any comments or suggestions of a nature necessary to place this case in condition for allowance, then the Examiner is requested to contact Applicant's undersigned attorney by telephone to promptly resolve any remaining matters.

Respectfully submitted,

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